Nesom, G.L. 2012. The author and type of *Apiastrum angustifolium* (Apiaceae). Phytoneuron 2012-89. 1–4. Published 2 October 2012. ISSN 2153 733X

THE AUTHOR AND TYPE OF *APIASTRUM ANGUSTIFOLIUM* (APIACEAE)

GUY L. NESOM
2925 Hartwood Drive
Fort Worth, Texas 76109
guynesom@sbcglobal.net

ABSTRACT

The correct author citation for the genus *Apiastrum* as well as two species and one variety, all published in 1840 by Torrey and Gray is "Nutt. in Torr. & Gray." Lectotypes for *Apiastrum angustifolium* and *Apiastrum latifolium* are at PH. The probable holotype of *Apiastrum angustifolium* var. *tenellum* is at PH.

KEY WORDS: *Apiastrum angustifolium*, author citation, type specimen

Within a day of posting of the study of *Spermolepis* and relatives (Nesom 2012), two scholars from the Harvard University Herbaria contacted me about misinterpretations regarding the authority and type of *Apiastrum angustifolium* as well as those of its synonyms. Corresponding corrections and other modifications are noted here.

Authorities

Dr. Kanchi Gandhi observes that while the name of the genus is correct as *Apiastrum* Nutt. ex Torr. & Gray, as I had it, author citations for the three species of *Apiastrum* published in the same work (Flora of North America, Torrey & Gray 1840) should have been "Nutt. in Torr. & Gray," not "Nutt. ex Torr. & Gray, as I had those.

Torrey and Gray were working with a manuscript from Nuttall. For the names involved, they cited "Nutt. mss." for *Apiastrum* as the genus name (p. 643) and for *Apiastrum angustifolium* var. *tenellum* (p. 644). For *Apiastrum angustifolium* and *Apiastrum latifolium* (p. 644) they cited "Nutt. ! mss."

> For each of the species and variety, a short description was given in quotes, evidently taken from Nuttall's manuscript. Additional descriptive notes, not in quotes, were provided for *A. latifolium* and the var. *tenellum*.
>
> For the genus, nothing in the description is in quotes except for the concluding sentence, "Fruit with the taste of *Sison amomum*." At the very end of the description is "*Nutt.*," alluding either to the immediately preceding quote or to the whole genus description. Even if the "Nutt." were meant only in reference to the statement about fruit taste, the latter still would constitute part of the validating description and it appears that the authority for *Apiastrum* as a genus can be correctly cited as "Nutt. in Torr. & Gray," in the same way as for the species. The authority would be cited as "Nutt. ex Torr. & Gray" "when only the name but not the validating description or diagnosis was ascribed to a different author or to different authors" [vs. the publishing authors] (McNeill et al. 2006, ICBN 46.4).

In sum, it appears that authorities for all of these 1840 names in *Apiastrum* should be cited as as "Nutt. in Torr. & Gray."

Type specimen of Apiastrum angustifolium

I cited a Nuttall collection at GH as the "probable holotype" of *Apiastrum angustifolium*. Dr. David Boufford, however, notes this: "Gray did not go to Harvard until 1842 and Nuttall's specimens at Harvard arrived even later, in 1864 from Elias Durand, so it seems the holotype may not be at Harvard. Most likely Torrey or Gray saw the specimen in Philadelphia, unless they saw specimens in Elias Durand's herbarium." And in any case, the authorship is attributed to Nuttall (in Torrey and Gray), thus recognition of original type material should reflect Nuttall's personal study.

My error in this went further, as the GH sheet that I cited (GH 00075076) was noted to have been collected in "north California" and possibly is not a duplicate of the explicitly labeled San Diego collections. The PH lectotype (Fig. 1) and the isolectotypes are clearly marked as to locality by Nuttall himself, matching the protologue.

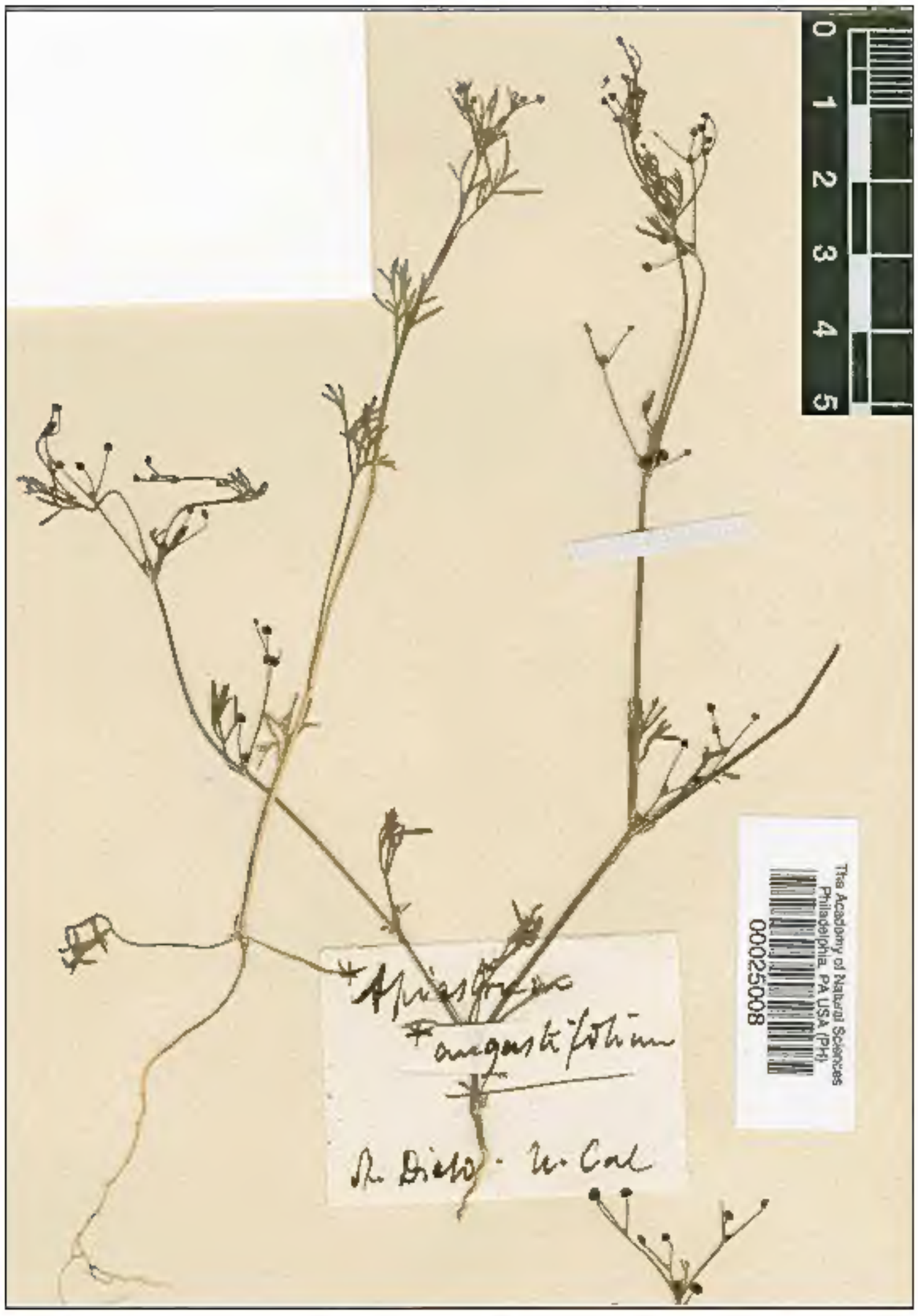

Figure 1. Lectotype of *Apiastrum angustifolium* (PH). These two plants are mounted at the upper right of the sheet. Three other collections are mounted on the same sheet.

The section on typification of the species is repeated here, incorporating the modifications suggested by Gandhi and Boufford, as well as other changes.

Apiastrum angustifolium Nutt. in Torr. & Gray, Fl. N. Amer. 1(4): 644. 1840. **LECTOTYPE** (designated here): **USA. California**. [San Diego Co.:] St. Diego, N Cal, [April, from protologue], *T. Nuttall s.n.* (PH barcode 00025008 digital image!, specimen at upper right of sheet; isolectotypes: NY barcode 00405717 digital image!; PH barcode 00025009 digital image!, specimen on right half of sheet). The protologue specifies San Diego as the locality, and labels for all three collections have "*Apiastrum angustifolium*, St. Diego, n Cal." in Nuttall's hand. Citation of a duplicate of this at K was in error.

Apiastrum angustifolium var. *tenellum* Nutt. in Torr. & Gray, Fl. N. Amer. 1(4): 644. 1840. **TYPE**: **USA. California**.[Los Angeles Co.:] Catalina [Santa Catalina Island], no other collection data (probable holotype: PH bar code 00025006 digital image!, mounted in lower left of sheet with 3 other collections; see below).

Torrey and Gray did not indicate that they saw a collection; their concept of the taxon evidently was from Nuttall's manuscript. No specimen has been located that is marked as "var. *tenellum*" but a collection labeled in Nuttall's hand as "*Apiastrum angustifolium*, Catalina" is probably the specimen from which Nuttall's description was drawn. It is on the same sheet that has the lectotype of *Apiastrum angustifolium* and isotype of *Leptocaulis inermis* (each a Nuttall collection) and a J.M. Bigelow collection of *A. angustifolium* (identified as such in Nuttall's handwriting). The two very small "Catalina" plants, both less than 10 cm high and characteristic of the reduction that commonly occurs in annuals, match aspects of the brief description ("stem dichotomous from the base; leaves less divided; rays of the umbel very slender; umbellets 1–2-flowered; seed more rugulose"). This supercedes my earlier and illogical estimate that an 1899 collection by E. Palmer was the probable type.

Apiastrum latifolium Nutt. in Torr. & Gray, Fl. N. Amer. 1(4): 644. 1840. **LECTOTYPE** (designated here, superceding the earlier choice of GH 00075075): **USA. California**. [Santa Barbara Co.:] "St. Barbara, n Cal." [on PH sheet], no other collection data, *T. Nuttall s.n.* (PH 01044838 digital image!; isolectotypes: BM digital image!; NY barcode 00405718 digital image!, specimen on right half of sheet; possible isolectotypes: GH 00075075, GH 00075076). Torrey and Gray cited "Nuttall! Douglas!" The two sheets at GH were collected by Nuttall in "north California," with no other indication of locality. The PH, NY, and BM labels give Santa Barbara as the locality, although the protologue does not specify a locality, and all three give Nuttall's own identification (in his hand) as *Apiastrum latifolium.*

The earlier attempt to designate a lectotype (Nesom 2012, 19 September) was incorrect from several perspectives. As pointed out by Dr. Boufford, the GH sheet was unlikely to have been part of the original material studied by Torrey and Gray, nor is it clear that it was part of the material upon which Nuttall based his concept. Only the labels at PH, NY, and BM have the identification of *Apiastrum latifolium*; those at GH are not identified with any name thus are perhaps or probably not duplicates of the explicitly identified specimens.

Helosciadium leptophyllum var. ? *latifolium* Hook. & Arn., Bot. Beechey Voy., 347. 1838. No collection was cited (pp. 347–348). The protologue gave only this: "The specimens are only in young fruit, and the segments of the upper leaves are considerably broader than in any form we have yet seen, while even the lower ones are broader than in *H. laciniatum*, DC., which we consider a mere variety of this species." As synonym of *Apiastrum* fide Mathias and Constance (1945).

ACKNOWLEDGEMENTS

Thanks to Kanchi Gandhi and Dave Boufford for their pertinent comments.

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